

Claims

- [c1] 1. A grounding element (1) for making possible an electrical connection between a structural element and an electrical terminal, said grounding element (1) comprising:
- a first portion (2);
 - a second portion (3) provided with a thread (6);
 - a central section (4) connecting the first portion (2) to the second portion (3) and the central section (4) having a first contact surface (8) in a plane where the central section (4) is connected to the second portion (3); and
 - the first portion (2) having a thread (5) and the central section (4) having a portion (4a) with at least one projecting ridge (7).
- [c2] 2. The grounding element as recited in claim 1, wherein the central section (4) further comprises a truncated cone (4a) having a tip end interconnected with the first portion (2).
- [c3] 3. The grounding element as recited in claim 1, wherein the central section (4) further comprises a disk-shaped portion (4b), one side surface of which forms the first contact surface (8).

- [c4] 4. The grounding element as recited in claim 3, wherein an edge of a disk-shaped portion (4b) of the central section (4) has at least two parallel surfaces.
- [c5] 5. The grounding element as recited in claim 4, wherein the disk-shaped portion (4b) is a mechanical element with an internally threaded hole, which is mounted on the grounding element (1).
- [c6] 6. The grounding element as recited in claim 1, further comprising a thread (6) on the second portion (3), the thread (6) being deformed.
- [c7] 7. The grounding element as recited in claim 1, wherein the first contact surface (8) is provided with at least one projection (10) extending therefrom.
- [c8] 8. An elongate grounding element for affecting and facilitating an electrically grounded connection, the elongate grounding element comprising:
an elongate body having a longitudinal axis and at least an externally threaded portion, said threaded portion having an insertible portion configured for non-threaded engagement with a support member when said threaded portion is inserted through a provided aperture in the support member; and
a means for enhancing electrically conductive contact

between the elongate body and the support member, said enhancement means comprising elongate ridges radially extending off of a central portion of the elongate body, said central portion being configured for non-twisting insertion into the provided aperture in the support member in a direction substantially parallel to the longitudinal axis of the elongate body, said elongate ridges forming an interference fit with the support member at a periphery of the provided aperture.

- [c9] 9. A method for providing an elongate grounding element and affecting and facilitating an electrically grounded connection between the elongate grounding element and a receiving support structure, the method comprising:
- providing an elongate grounding element having an elongate body establishing a longitudinal axis thereof and having at least an externally threaded portion;
 - inserting a part of said threaded portion through a provided aperture in the support member and thereby establishing non-threaded engagement of the elongate grounding element with the support structure;
 - enhancing electrically conductive contact between the elongate body and the support member by causing elongate ridges that radially extend off of a central portion of the elongate body to non-twistingly press into the pro-

vided aperture in the support member in a direction substantially parallel to the longitudinal axis of the elongate body; and
forming an interference fit between the elongate ridges and the support member thereby affecting and facilitating an electrically grounded connection between the elongate grounding element and the support structure.